UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

MEMORANDUM

DATE:

SUBJECT: **ACTION MEMORANDUM** - Request for a Time-Critical Removal Action at the Acme Chicago Coke Plant, located in Chicago, Cook County, Illinois (Site ID #B5AY)

FROM: Mike W. Ribordy, On-Scene Coordinator
Emergency Response Branch - Section 2

TO: Richard C. Karl, Director
Superfund Division

THRU: Linda M. Nachowicz, Chief
Emergency Response Branch

I. PURPOSE

The purpose of this memorandum is to request and document your approval to expend up to $266,641 to abate an imminent and substantial threat to public health, welfare, and the environment at the Acme Chicago Coke Plant (Site) located in Chicago, Cook County, Illinois. This response action is necessary to mitigate the imminent and substantial threat posed by the presence of uncontrolled hazardous substances and wastes abandoned at the Site. The presence of hazardous substances existing at the Site has been documented and shown to include polychlorinated biphenyl compounds (PCBs), presumed asbestos containing material (PACM), corrosives, solvents, oils, paints, cleaners and various unidentified materials in soil, drums, containers, and cylinders.

This time-critical removal action will mitigate the threats described above by proper identification, consolidation, packaging, and securing of abandoned hazardous substances in drums, tanks, containers, and cylinders. The perimeter fence will be repaired to prevent unrestricted access to the facility. Additional Site activities may include the removal of grossly contaminated soils. This response action will be conducted in accordance with Section 104(a)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC §9604(a)(1) to abate or eliminate the immediate threat

posed to public health and/or the environment by the presence of abandoned hazardous wastes. The hazardous nature of the wastes present at the Site and their uncontrolled condition require that this action be classified as a time-critical removal action. The project will require approximately 30 working days to complete.

The Acme Chicago Coke Plant is not presently on the National Priorities List (NPL).

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID # ILN000509241

A. Physical Location and Description

The Acme Chicago Coke Plant is located at 11236 South Torrence Avenue, Chicago, Cook County, Illinois. The geographical coordinates for the Site are Latitude: 41°41'30" N, Longitude: -87°33'35" W.

The approximately 102-acre Site is located in a primarily industrial area located less than ½ mile from a residential area. The Site is comprised of approximately 20 buildings, including two coke batteries, power house, maintenance building, and by-products building. A chain-link fence surrounds the Site; however, the Site is unrestricted due to vandals cutting the fence and locks. The nearest waterway is the Calumet River located approximately 0.25 miles east of the facility.

B. Environmental Justice Analysis

According to the Region 5 Superfund Environmental Justice Analysis in Illinois, the low income percentage is 27% or greater and the minority percentage is 32% or greater. To meet the Environmental Justice (EJ) concern criteria, the area within one mile of the Site must have a population that is twice the state low income and/or twice the state minority percentage. That is, the area must be at least 54% low income and/or 64% minority. There are approximately 2,976 people who live within one mile of the Site. The minority population is 95% and the low income population is 57%. Therefore, this Site does meet the Region's EJ criteria based on demographics as identified in Region 5's "Interim Guidelines for Identifying and Addressing a Potential EJ Case", (June, 1998) (See Attachment 1).

C. Site Description and Background

Acme Metals Incorporated operated in two separate business segments: steel making, principally through its wholly owned subsidiary, Acme Steel Company; and steel fabricating, principally through its wholly owned subsidiary, Acme Packaging, and Acme Packaging's wholly owned subsidiary, Alpha Tube Corporation.

Acme Steel Company was an integrated producer of steel products. Products included: high carbon, alloy, and high-strength flat-rolled steels that were converted by outside companies into industrial equipment, pipes, tubes, and tools. Acme Steel Company was divided into three facilities located in Riverdale and Chicago, Illinois: coke plant (Torrence Avenue, Chicago), blast furnace (Burley Avenue, Chicago), and steel making (Perry Street, Riverdale). The Acme Chicago Coke Plant is the subject of this Action Memorandum.

The coke plant is located on Torrence Avenue in Chicago, Illinois. Coal was received by truck and converted to coke for use in the blast furnace. A by-products plant was operated to recover tar, ammonia, and light oil from coke oven gas, and remove impurities from the gas. An ammonium sulfate solution was produced using ammonia removed from the gas. The cleaned gas was used for underfire fuel for the coke batteries, and fuel for the blast furnace stoves and boilers. The coke was transferred to the blast furnace using an 11,000 foot long covered conveyer system.

On September 28, 1998, Acme Metals and its subsidiaries filed separate voluntary petitions for protection and reorganization under Chapter 11 of the United States Bankruptcy Code. In June 2001, the Company entered into a contract for the sale of Alpha Tube to AK Steel. Also in 2001, the Company began a shut-down of the operating facilities and liquidation of the working capital assets of Acme Steel.

On October 10, 2002, International Steel Group (ISG) purchased a portion of the assets of Acme Steel from bankruptcy. The bankruptcy proceedings are now closed and an order of abandonment was issued for the unsold assets of Acme Metals including, apparently, the Chicago Coke Plant. Currently, there is not an identified owner of the real property comprising the Site.

D. U.S. EPA Site Assessments

During the week of July 29, 2002, the United States Environmental Protection Agency (U.S. EPA) conducted a site assessment at each of the following Acme properties: Riverdale, Chicago Coke, and Chicago Furnace Plants. The purpose of the site assessment was to determine the threats to human health and the environment at the closed down portions of the Acme Steel Company facilities. On August 1, 2002, U.S. EPA inspected the Chicago Coke Plant. Concerns identified at the Chicago Coke Plant included:

- Profile and dispose of cyanide sand from sand filter.
- Hole in perimeter fence
- Impoundments containing sediment
- Naptha odor in and around buildings in center of facility
- Uncontainerized lead batteries at facility

On November 24, 2004, representatives from U.S. EPA, Superfund Division, Emergency Response Branch, and a representative from the Chicago Department of the Environment (Chicago DOE) conducted a site inspection at the Acme Chicago Coke Plant. The purpose of the inspection was to determine whether the current conditions at the Site pose an immediate threat to public health, welfare, and the environment.

The following was observed during the November 24, 2004, inspection:

- There are two above ground storage tanks (ASTs) located inside the Light Oil Building. The tanks are labeled "Caution Contains Benzene Cancer Hazard." It is unknown whether any material remains in the tanks. However, there is a trench/sump located inside the building filled with an unknown petroleum product. This trench leads outside the building into a concrete secondary containment heavily stained with a petroleum product.

- There are approximately 20 buildings/structures remaining on the Site. The buildings are open and unsecured. There is PACM located throughout this Site. PACM is located inside and outside the buildings and is in friable condition. Broken pieces of transite panels have been observed scattered on the ground.

- There are numerous containers scattered throughout the Site. Containers range from pints, 1-gallon, 5-gallon, fifty-five gallon and many storage tanks. Containers contain corrosive, solvents, oils, paints, cleaners and unknown

containers with a clear liquid. Some of the containers are leaking onto the ground or already leaked onto the ground.

- There are approximately 100 cylinder tanks at the Site. Tanks are labeled MGW - refrigerant, propane, oxygen and acetylene. Some of the tanks appear to be full. The tanks are not secured.

- Numerous lead acid batteries are scattered throughout the Site. Batteries are from motor vehicle equipment, backup/emergency lights and other back up power sources.

- Numerous transformers are located throughout the Site. Some of the transformers have blue labels indicating the presence of PCBs. Others do not appear to be labeled containing or not containing PCBs. The transformers do not appear to be leaking.

- Two of the buildings' basements appear to be flooded. There is a petroleum product floating on top of the standing water. Pipes located in the flooded basement areas contain PACM in friable condition.

- There are seven full 55-gallon drums labeled "United Refractories Inc." The labels on the drums state the material inside is a chemical binder marked health hazard (Silicosis). The product might contain alumina, alumina silicates, and magnesia, which are a regulated nuisance dust. There are also numerous other viable refractory supplies (powders, mortars and bricks) stored in this building.

- There are minor sulfuric acid odors permeating around a concrete secondary containment area. It appears there was a sulfuric acid tank that was taken apart by unknown individuals. The liquid inside the containment area and the debris located outside the containment area was tested with pH paper and a pH of 0 was recorded.

- A heavy naphtha odor was noted around the entire central area of the Site.

- Coke byproducts and waste materials were observed on the ground throughout the facility.

There were a number of tanks and containers present throughout the Site. Markings on the containers indicated the presence of corrosives, solvents, oils, paints, and cleaners in addition to

unknown materials in unmarked containers. Friable asbestos materials were found inside buildings and in the surrounding soils. Some of the potential hazardous wastes and/or hazardous constituents had leaked from the abandoned and deteriorated containers. Coke byproducts and wastes have been deposited in soils throughout the property including wetland areas. A large segment of the chain link perimeter fence in front of the facility had been removed and replaced with an orange snow fence. Other gaps in the fence were also present.

E. Other Actions

The Illinois Environmental Protection Agency (Illinois EPA) conducted an assessment of the Site during the week of May 2, 2005. Results from the assessment are not currently available.

F. Current Site Conditions

The Chicago DOE inspected the Site in April 2005 and believes conditions at the Site have continued to deteriorate. Some of its findings include:

- Although the missing section of fence at the front of the facility has been replaced, there are still several holes in the perimeter fence which allow unrestricted access to the Site. In addition, the locks at the front entrance have been broken.

- Scavengers appear to be entering the Site on a frequent basis. Numerous transformers are now missing, turned over, or damaged. Others appear to be staged for future removal. The Chicago DOE does not believe the PCB-containing transformers have been damaged yet.

III. THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions present at the Acme Chicago Coke Plant Site constitute an imminent and substantial threat to the public health, welfare, or the environment based upon the factors set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), as amended, 40 CFR Part 300. These factors include, but are not limited to, the following:

1) ***Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;***

This factor is present at the Acme Chicago Coke Plant Site due to unrestricted access to the Site and buildings, the presence of human activity, the deteriorating nature of the buildings, and hazardous materials present in abandoned tanks, containers and in surrounding soils.

Unrestricted access to the Site and buildings allows contact with drums and their contents. Many of the drums at the facility are deteriorating, thereby exposing or threatening to expose their contents to the environment. Markings on the containers indicate the presence of corrosives, solvents, oils, paints, and cleaners in addition to unknown materials in unmarked containers. Some of the potential hazardous wastes and/or hazardous constituents have leaked from the abandoned and deteriorated containers. Since some of the waste material is not contained and containers are located outside and are exposed to the various weather conditions, the Site conditions are subject to further deterioration.

In addition, many of the transformers on-site have been damaged or removed by scavengers. Some of the transformers contain PCBs. Friable asbestos materials were found inside buildings and in the surrounding soils. Coke byproducts and hazardous substances have been deposited in soils throughout the property including wetland areas.

Although the immediate area is primarily industrial, there are approximately four homes adjacent to the facility and a residential neighborhood and school are less than ½ mile north of the facility. Trespassing, scavenging, and vandalism are also worrisome factors under these circumstances. A concerned citizen claims a homeless person has been sighted living on the Site.

2) **Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;**

This factor is present at the Acme Chicago Coke Plant Site due to the uncontrolled existence of drums and tanks containing a variety of wastes, some of which are potentially hazardous. There are numerous containers scattered throughout the Site. Containers range from pints, 1-gallon, 5-gallon, 55-gallon and many storage tanks. Containers contain corrosives, solvents, oils, paints, cleaners and unknown clear liquids. Some of the

containers are leaking onto the ground or already have leaked onto the ground. There are approximately 100 cylinder tanks present on-site. Tanks are labeled MGW-refrigerant, propane, oxygen and acetylene. Some of the tanks appear to be full. The tanks are not secured. Site conditions are subject to deterioration since some of the waste material is not contained. In addition, containers are located in buildings with leaking roofs and no heat, or outside where they are exposed to various inclement weather conditions. Furthermore, scavengers have damaged or removed transformers which may contain PCBs.

3) ***High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;***

This factor is present at the Site due to the existence of sulfuric acid odors permeating around a concrete secondary containment area. It appears there was a sulfuric acid tank that was taken apart by unknown individuals. The liquid inside the containment area and the debris located outside the containment area was tested with pH paper and a pH of 0 was recorded.

A heavy naphtha odor was noted around the entire central area of the Site. Coke byproducts and waste materials were observed on the ground throughout the facility. Also threatening release to the soil are leaking drums, PCB transformers, flammable gas cylinders, and laboratory chemicals.

There are no controls in place to prevent migration of these hazardous substances. Numerous human receptors are located within one-half mile of the Site and the Calumet River is less than one-half mile away. Trespassing has been documented at the Site.

4) ***Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;***

This factor is present at the Site due to the deteriorating nature of the buildings. Some of the drums are located in open areas and exposed to the effects of weather. Cold temperatures can exacerbate the poor condition of the drums through freezing and thawing. In addition, high temperatures can easily exceed 68° F, increasing the chance for ruptures of the drum by causing them to pressurize and bulge, thereby increasing the possibility of fire or explosion.

In the summer months, this area of Illinois is subject to periods of arid weather and moderately high temperatures. These warm, dry periods can cause soils at the Site to become dust-like. These conditions increase the likelihood that contaminated soils will be picked-up by westerly winds, migrate off-site and impact the surrounding residential properties.

Large rain events, coupled with inadequate vegetative cover, could result in the off-site migration of the contaminated surface soils.

IV. ENDANGERMENT DETERMINATION

Until the contamination presently located at the Site is removed and disposed of, the threats posed by the presence of hazardous substances, if not addressed by implementing the response actions selected in this Action Memorandum, present an imminent and substantial endangerment to public health and welfare and to the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1) Proposed action description

The On-Scene Coordinator (OSC) proposes the following actions to mitigate threats posed by the presence of hazardous substances at the Acme Chicago Coke Plant:

a) Prepare a Site work plan that describes the tasks to be performed and includes a time-line for their performance.

b) Develop and implement a site-specific Health and Safety Plan addressing continuous monitoring of airborne contaminants and dust control measures.

c) Implement Site security measures as necessary to prevent access to contaminated areas.

d) Sample, analyze and categorize drums, smaller containers, cylinders, tanks, unknown materials, facility contents, debris, and grossly contaminated soils, and stage them for disposal. Bulk/re-containerize compatible waste streams, and appropriately prepare for their disposal at off-site disposal facilities in accordance with U.S. EPA's Off-Site Rule (40 CFR § 300.440).

e) Clean emptied tanks, piping, debris, drums and other containers as necessary, cut them to size and dispose of them at off-site disposal facilities.

f) Characterize, remove and properly reclaim/dispose of off-site the transformers present on-site.

g) Remove and properly dispose of off-site friable asbestos containing material located in surface soils.

h) Properly address any additional hazardous waste and/or materials identified during the removal action.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances or contaminants at the Site which may pose an imminent and substantial endangerment to public health and safety, and to the environment. These response actions do not impose a burden on the affected property disproportionate to that which the property contributes to the conditions being assessed.

The removal action will be taken in a manner not inconsistent with the NCP. The OSC has begun planning for provisions of post-removal site control, consistent with the provisions of Section 300.415 of the NCP.

2) Contribution to remedial performance

The proposed action will not impede future responses based upon available information. The Site is a non-NPL site for which remedial action has not been planned to date. The proposed removal action will address all threats meeting the NCP Section 300.415(b)(2) removal criteria as identified in Section III of this Action Memorandum.

3) Applicable or relevant and appropriate requirements (ARARs)

On June 14, 2005, a letter was sent to Bruce Everetts with the Illinois EPA, requesting State applicable or relevant and appropriate requirements (ARARs). Any state ARARs identified in a timely manner for this removal action will be complied with to the extent practicable.

4) Project schedule

The project is estimated to be completed in 30 days with 10 hour work days.

B. Estimated Costs

The estimated costs to complete the above actions are summarized below. Detailed Contractor costs are presented in Attachment 2.

REMOVAL PROJECT CEILING ESTIMATE

EXTRAMURAL COSTS:

Regional Removal Allowance Costs:

Total Cleanup Contractor Costs (This cost category includes estimates for ERRS and subcontractors. Includes a 15% contingency.)	$ 214,362

Other Extramural Costs Not Funded from the Regional Allowance:

Total START, including multiplier costs	$ 17,500
Subtotal, Extramural Costs	$ 231,862
Extramural Costs Contingency (15% of Subtotal, Extramural Costs)	$ 34,779
TOTAL REMOVAL ACTION PROJECT CEILING	**$ 266,641**

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Continued risk to public health and the environment will result if no action or delayed action ensues. Given the Acme Chicago Coke Plant Site conditions, the nature of the hazardous substances documented on-site, and the potential exposure pathways to nearby populations described in Sections II and III above, actual or threatened release of hazardous substances from the Site, if not addressed by implementing the response actions selected in this Action Memorandum, would present an imminent and substantial endangerment to public health, welfare, or the environment.

VII. OUTSTANDING POLICY ISSUES

The removal action is not precedent setting because asbestos is not a principal contaminant of concern at the Site. Headquarters has been consulted regarding the asbestos issues.

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this Site is contained in the Enforcement Confidential Addendum.

The total U.S. EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be $445,499[1].

($266,641 + $20,500) + (55.15% x $287,141) = $445,499

[1] Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgement interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States's right to cost recovery.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Acme Chicago Coke Plant Site located in Chicago, Cook County, Illinois, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the Site (Attachment 3).

Conditions at the Site continue to meet the NCP, Section 300.415 (b)(2) criteria for a removal action and I recommend your approval of the proposed removal action. The total estimated project ceiling, if approved will be $266,641. Of this, an estimated $249,141 may be used for cleanup contractor costs. You may indicate your decision by signing below.

APPROVE: _____ DATE: 9/15/05
Director, Superfund Division

DISAPPROVE: _____ DATE: _____
Director, Superfund Division

Enforcement Addendum

Attachments
1. Region 5 EJ Analysis
2. Detailed Cleanup Contractor Cost Estimate/Independent Government Cost Estimate
3. Administrative Record Index

cc: D. Chung, U.S. EPA, 5202-G
M. Chezik, U.S. DOI, **w/o Enf. Addendum**
B. Everetts, Illinois EPA **w/o Enf. Addendum**
T. Sheahan, Chicago DOE **w/o Enf. Addendum**

BCC PAGE

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

(REDACTED 1 PAGE)

ENFORCEMENT ADDENDUM

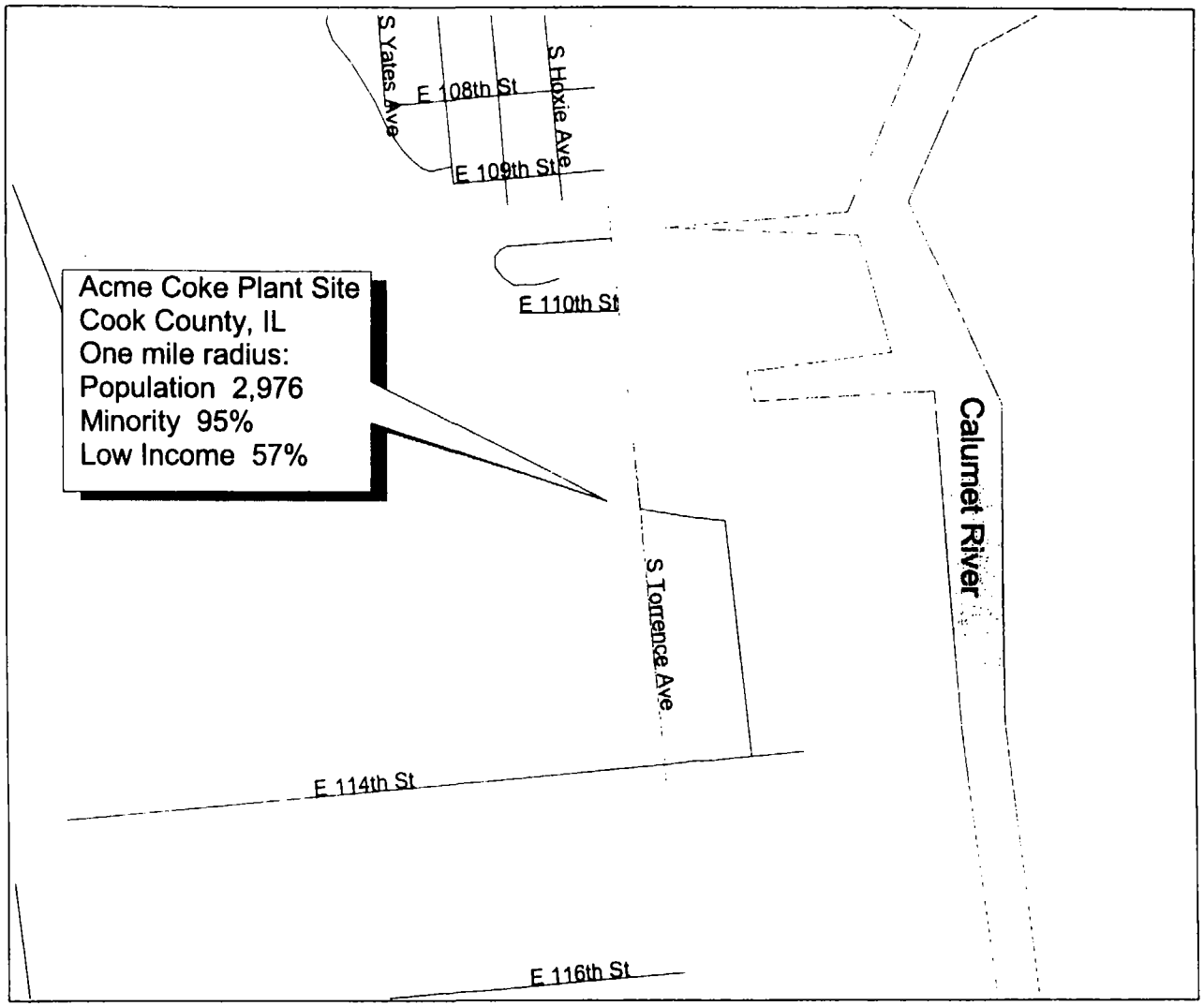
THE ACME CHICAGO COKE PLANT SITE
CHICAGO, COOK COUNTY, ILLINOIS
JULY 2005

(REDACTED 2 PAGES)

ENFORCEMENT CONFIDENTIAL
NOT SUBJECT TO DISCOVERY

Region 5 Superfund EJ Analysis

Acme Coke Plant Site Chicago, IL



State of Illinois averages:
Minority: 32%
Low Income: 27%

U.S. EPA Region 5
Environmental Justice Case Criteria
for State of Illinois

Minority: 64% or greater

Low Income: 54% or greater

Date of Map: 2/23/05

Source of Map: Census 2000 Database/
ArcView 3.0

DETAILED CLEANUP CONTRACTOR COST ESTIMATE
INDEPENDENT GOVERNMENT COST ESTIMATE

THE ACME CHICAGO COKE PLANT SITE
CHICAGO, COOK COUNTY, ILLINOIS
JULY 2005

(REDACTED 3 PAGES)

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ATTACHMENT 3

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
ACME CHICAGO COKE SITE
CHICAGO, COOK COUNTY, ILLINOIS

ORIGINAL
JULY 6, 2005

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	07/19/02	U.S. EPA	File	Closure Activities/Status Report for the Acme Steel Company, Chicago Coke Plant, w/Attachments	69
2	09/06/02	Balla, T., Weston Solutions, Inc.	Collins, M., U.S. EPA	Site Assessment Report for the Acme Steel Company, Riverdale, w/Attachments	83
3	10/27/04	City of Chicago, Dept. of Environment	File	Narrative Site Assessment Report for the Acme Coke Plant w/Attachments	18
4	00/00/00	Ribordy, M., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum: Request for a Time Critical Removal Action at the Acme Chicago Coke Plant Site **(PENDING)**	